Using Habitat Mapping in Coastal Management – Part 1
June 14, 2006 – Bluffton, SC

Meeting Purpose: The overall goal of the meeting series will be to provide developers, municipal and county governments with a priority habitat mapping tool, so development decisions can be guided by scientific understanding of impacts to different habitats/plant communities and their associated flora and fauna. The purpose of Part 1 was to select an appropriate habitat classification system for South Carolina coastal woodland habitat/plant communities and identify issues with implementation of this system into municipal and county government decisions.

Meeting Notes:

1) Introduction of Integrated Coastal Management (ICM) Tool:

Presentation by Robert McGuinn of NOAA Coastal Service Center on their Integrated Coastal Management Tool which was designed to help coastal managers develop greater strategic awareness when approaching natural resource decisions. The tool allows analysis of the current state of the ecosystem as well as prediction of multiple future condition predictions given certain management decisions

2) Selection of an Effective Classification Scheme:

Presentation by Tom Kutcher of Narragansett Bay National Estuarine Research Reserve on the process of selecting the appropriate habitat classification scheme to use in a tool such as the Integrated Coastal Management Tool. After the presentation, meeting attendees broke into four discussion groups and began the process to select a classification scheme. Discussion was based on points from slide 10 of Kutcher presentation – working backwards to select a usable scheme. The groups then summarized their discussions and the pros and cons of the classification scheme of choice were discussed as a large group. Notes from all discussion groups are consolidated below:

Define objectives:

Identify critical habitats and populations of significant flora/fauna species
Maintain wildlife diversity
Preserve biodiversity – habitat type and species at local level
Protect wetlands at county level
Help communities prioritize where development may occur
Help developers "do the right thing"
Encourage development that protects and preserves our natural history

Products needed to reach objectives:

To preserve biodiversity → We must provide clear and concise management technology
In addition there must be: 1)Education 2) Habitat ID/Inventory 3) BMPs

Parameters needed in technology product:

Tool must be flexible to allow coarse and fine data
Hierarchical system but flexible enough to customize

Consider not only what's present, but what's historically present (focus on present)
Allow overlay of other data sets (ex. hydrology, cultural artifacts, species of concern)
Classes should connect to other schemes
Work at the development level
Include terrestrial and wetland categories
Allow ranking systems (ex. habitat quality, rarity, usage and degree of threat to habitat)

Choose classification system:
Nature Serve (NVCS) system
Pros:
Enough detail to know what is rare
Able to prioritize
Widely used (SC Heritage Program and TNC uses), peer network support
Standardized, online, free
Continually updateable – can add habitats, system will improve as used
Training available and supported externally
FGDC standard – may be better for regulatory, NC has used this way
Good for 'development scale'

Cons:
Does not hold true for extreme habitat (transitional) if focus is only on dominant species
Need specialist – issue to get developers to do this
Intense – ecology/plant taxonomy – need resources

Questions of the system:
How does it handle wetlands?
How does it handle managed lands?
How to handle transitional zones?
How to handle degraded habitats?
Additional classifications done in more detail – contact Bob Peet at UNC

Additional notes:
CCAP data for larger scale – ordered system – contact Nate Carroll (CSC)
CELCP – state land purchase – contact Rocky Browder (OCRM)

3. Discussion of Implementation Issues to Use ICM tool
Attendees broke back into four groups and identified needs for implementation of the ICM tool into county and municipal decisions. Notes from all discussion groups are consolidated below:

1. Training and certification for surveyors on Nature Serve system, data collection and entry, wetland delineation, botanical taxonomy
    - Surveyors must have verifiable skills adequate to identify species in taxa
    - Considerations: need to be standardized, will there be a fee?, field trips?
    - Certification can lead to list of approved contractors for county/municipality
2. Training for county/municipality staff on use of ICM tool

- Considerations: who will provide?

3. Education of political leaders and general public on need for tool and system
    - Considerations: little understanding of ecology, changing demographics, necessary to understand impact of decisions
    - Important to build credibility
4. Buy in and political will of decision makers to make legal/ordinance changes
    - Tie use of system and tool for decisions into comprehensive land use plan
    - County/municipality must require and recognize certification
    - Regulations in place to protect certain habitats and species
    - Appropriate fines for violations
5. Buy in and involvement from development community through incentives
    - Considerations: expedited permitting, marketing benefits
6. Availability of software and staff necessary to run tool
    - Staff for data submission and interpretation
    - Staff for random checks to validate data, discuss compromises, and enforce violations
7. Funding for computers, software, training and certification, staff, data housing
8. State of science and development of BMPs for habitats
    - Necessary to provide developers with information to direct use of habitat for species of concern
    - Once state of science determines what is out there, need to fill in gaps
    - Inventory is regionally important for continuity of habitat
9. Questions for further development of tool
    - When is data required (lot vs. subdivision)?
    - Is a regional mandate necessary?
    - Is the end goal to have analysis done at county level prior to developers?
    - Who carries this project forward?